Technical data WRL-S series



Pseudoplastic wire rope lubricants

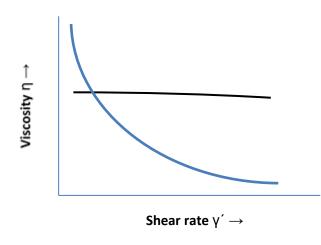
Description

MOLYSLIP S series products are premium performance lubricants specifically designed to overcome the challenge of effectively lubricating and protecting steel wire ropes. Formulated from high quality base oils and incorporating a pseudoplastic thickener system MOLYSLIP S series products solve the problem of balancing penetrating properties and wash-off resistance without the unnecessary compromises of conventional greases.

The majority of wear and corrosion of a wire rope occurs in the core. This is hidden away from view and difficult to reach through the outer strands. Therefore an effective rope lubricant must have excellent penetration properties to deliver protection in this vital area. This is best achieved by low viscosity materials that have little resistance to flow. However, low viscosity products have poor resistance to wash-off caused by rain or water immersion, for this a tenacious high viscosity material is required. These competing and opposite demands often result in a compromise product.

WRL-S series products do not compromise. By utilizing a thickener system that exhibits pseudoplastic behavior WRL-S10 and WRL-S20 provide both excellent penetration and wash-off protection.

What is a pseudoplastic grease?



Typical "Newtonian" rheology:

Viscosity remains constant regardless of shear rate. Compromise must be made when selecting balance of penetration and wash-off protection properties

Pseudoplastic rheology:

Viscosity dramatically reduces when shear is applied allowing maximum penetration during application. Structure re-forms instantly after application giving maximum wash-off resistance

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MOLYSLIP WRL-S series products are suitable for use on most wire rope types and constructions operating in a wide variety of conditions and equipment such as cranes, ports, oilfield, construction and mining. They can also be used in applications such as ROV umbilical cables to protect from corrosion.

WRL-S10 is a translucent grease designed to allow easy inspection of the rope

WRL-S15 is a solvent containing version of S10, designed to allow the product to be applied via a pressure sprayer

WRL-S20 is a graphite reinforced version of S10 with enhanced load carrying for arduous operations

Features and benefits

- High load carrying and wear reduction capability protects wires and strands from wear
- Excellent corrosion resistance protects ropes operating in wet conditions
- · Highly adhesive, tenacious film extends re-lubrication intervals
- · Excellent low temperature flexibility prevents flaking and cracking

Instructions for use

MOLYSLIP WRL-S10 and WRL-S20 can be applied manually with a brush or swab, or via a high pressure applicator (for example a Masto type system). WRL-S15 is designed for application via pressure spray equipment.

Packaging

WRL-S10 and WRL S-20 are available in 18kg pails

WRL-S15 in available in a 20ltr poly container

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Technical data (typical values)

Property	Test method	WRL-S10	WRL-S15	WRL-S20
Appearance	-	Translucent brown grease	Clear slightly gelled fluid	Smooth black grease
Worked penetration	IP50	315	315	310
NLGI classification	-	1	1	1
Salt spray	ASTM B- 117	>500 hours	>500 hours	>500 hours
4-ball weld load	IP239	280kg	280kg	400kg
Operating temperature range	-	-50°C to +130°C	-50°C to +130°C	-50°C to +130°C

Note: results for WRL-S15 apply to the dry film

Storage

Store MOLYSLIP WRL-S series products out of direct sunlight. Storage temperature should be controlled to between 5°C and 35°C.

The product information in this publication is based on knowledge and experience at the time of printing. There are many factors outside our control or knowledge which affect the use and performance of our products, for which reason it is given without responsibility. Issue date 07-17